

REMARKS

Claims 1-32 are pending in the present application. Claims 1-32 have been examined and are rejected. In the above amendments, claims 1, 16, 21, 22, 27, 31 and 32 have been amended. Therefore, after entry of the above amendments, claims 1-32 will be pending in this application. Applicant believes that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

Rejections Under 35 USC § 103(a)

Claims 1-9, 11 and 22-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sharma et al. (U.S. Patent No. 6,069,871) in view of Satarasinghe (U.S. Patent No. 6,026,301).

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Sharma in view of Satarasinghe and further in view of King (U.S. Patent No. 5,781,861).

Claims 12-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sharma in view of Satarasinghe and further in view of Kurtz (U.S. Patent No. 5,826,190).

Claim 1 of the present invention, as amended, recites:

“A system for improving efficiency of a wireless communications network employing a plurality of frequencies per cell comprising:

first means for monitoring a network load associated with each of said plurality of frequencies and providing corresponding status values in response thereto;

second means for comparing said status values to a predetermined criterion and providing an indication in response thereto when one or more of said status values meet said criterion; and

third means for redistributing said network load in accordance with said indication, the third means including determining which mobile stations are within an inner coverage area of a cell based on whether round trip delays (RTD) of the mobile stations are less than a threshold, and initiating handoff of at least one mobile station within the inner coverage area to a different frequency on the cell.”

Applicant submits that claim 1 is patentable over Sharma in view of Satarasinghe for at least the following reasons.

First, the combination of Sharma and Satarasinghe does not disclose “third means including determining which mobile stations are within an inner coverage area of a cell based on whether round trip delays (RTD) of the mobile stations are less than a threshold,” as recited in claim 1. This feature is disclosed in FIG. 2 and page 12, lines 10-14 of the present application. Sharma fails to disclose this claimed feature, as suggested in the rejection.

Satarasinghe discloses handoff from a CDMA network to an AMPS network or a second CDMA network. Satarasinghe discloses comparing the measured RTD of a mobile unit **33** against RTD1 and RTD2 thresholds, initiating handoff when the measured RTD is greater than the RTD1 threshold, and executing the handoff when the measured RTD is greater than the RTD2 threshold. Satarasinghe performs intersystem handoff between two cellular networks and thus detects when mobile unit **33** has moved outside of the coverage of the CDMA network. In contrast, claim 1 recites determining which mobile stations are within an inner coverage area of a cell. Claim 1 further recites making this determination based on whether RTDs of the mobile stations are less than a threshold. Satarasinghe does not disclose these features of claim 1.

Second, the combination of Sharma and Satarasinghe does not disclose “third means including ... initiating handoff of at least one mobile station within the inner coverage area to a different frequency on the cell,” as recited in claim 1. This feature is also disclosed on page 12, lines 10-14 of the present application. Satarasinghe discloses handoff from one cell in a CDMA network to another cell in an AMPS network or a second CDMA network. Satarasinghe does not disclose handoff to a different frequency on the same cell in order to balance network load.

For at least the above reasons, Applicant submits that claim 1 is patentable over Sharma in view of Satarasinghe. Independent claims 22, 31 and 32 have been amended to recite features similar to the features noted above for claim 1.

Accordingly, the §103(a) rejection of independent claims 1, 22, 31 and 32 should be withdrawn.

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Claims 2-21 and 23-30 depend, either directly or indirectly, from one of claims 1 and 22 and are thus believed to be allowable at least for the reasons that they depend from an allowable base claim.

Accordingly, the §103(a) rejection of dependent claims 2-21 and 23-30 should be withdrawn.

CONCLUSION

In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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